

# DECLARATION OF DR. HUTTER-PAIER

I, the undersigned Birgit Hutter-Paier, hereby declare and state as follows:

I am a study director at JSW-Research, Forschungslabor GmbH, in Graz, Austria (hereinafter JSW). A true and correct copy of my *curriculum vitae* is attached hereto as Exhibit A.

JSW received a contract from Dr. Beka Solomon, Department of Molecular Biology and Biotechnology, Tel Aviv University, Ramat Aviv, Israel, to conduct a study on the effects of an immunization in hAPP-transgenic mice. I was the study director for this project. As part of this project, JSW received a test-substance code-named BS-5 from Prof. Solomon's laboratory.

The following actions were taken by JSW in the course of the study as it relates to BS-5. These actions were performed by me or under my direct supervision. The animals used in the study were 9-10 months old male/female hAPP(751) transgenic mice at start. These mice are a model of the progressive learning and memory impairment that is a cardinal feature of Alzheimer's disease, as is established in Moran et

al, "Age-related learning deficits in transgenic mice expressing the 751-amino acid isoform of human  $\beta$ -amyloid precursor protein", PNAS USA 92:5341-5345 (1995). They also show age-related  $\beta$ -amyloid deposition. See Higgins et al, "Early Alzheimer's disease-like histopathology increases in frequency with age in mice transgenic for  $\beta$ -APP751" PNAS USA 92:4402-4406 (1995).

Ten of these mice were given 100  $\mu$ l of undiluted BS-5 via intranasal administration. Each mouse was held firmly with one hand with its head pointing towards the ceiling and phages were applied with the second hand using a 100  $\mu$ l pipette with narrow sterile protected tips that contained 50  $\mu$ l solution. Approximately 25  $\mu$ l per nostril were applied, in short intervals to make sure that the solution wetted the mucosa of the nose and was not swallowed. The mice received a total of six administrations of 100  $\mu$ l of undiluted BS-5 per administration. The time schedule of the administrations is shown in Figure 1 attached hereto. As can be seen, nearly six months after initiation of the immunization, the mice were narcotized with an overdose of Isofluran anesthesia and euthanized. After brain removal, one hemisphere was post-fixed for 24 hours in 4% paraformaldehyde/PBS (pH 7.4). After 24 hours of post fixation, hemispheres were transferred to PBS (pH 7.4) and embedded in paraffin. Then, these brain

hemispheres were shipped to Prof. Solomon's laboratory for analysis.

JSW subsequently provided Dr. Beka Solomon similar hemispheres of control hAPP(751) untreated transgenic mice and untreated non-transgenic littermates. The hemispheres were prepared in the same manner as discussed above for the treated mice and were shipped to Dr. Solomon's laboratory for analysis.

I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

07 June 2006  
Date

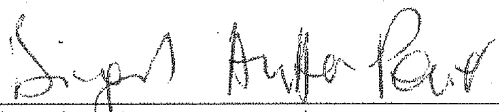
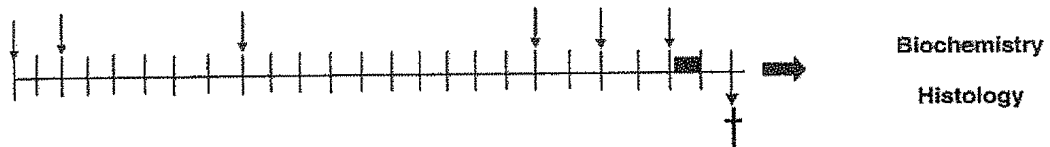
  
Birgit Hutter-Paier

Figure 1



Each black vertical line represents one week. The upper arrows mark the immunization. The lower arrow represents the time of sacrifice of the mice.



Geistingerweg 40  
8053 Graz  
Austria

[bhutterpaier@jswresearch.com](mailto:bhutterpaier@jswresearch.com)

## Birgit Hutter-Paier, Ph.D.

---

**Personal:** Born: October 2, 1961  
Nationality: Austria  
Marital status: Married

---

**Education:** 1968 - 1972: Elementary school St. Michael, Austria  
1972 - 1981: Comprehensive secondary school  
Wolfsberg, Austria  
1981 - 1989: Study of Biology at the Karl – Franzens  
University, Zoology, Graz, Austria  
1986 - 1989: Research project for the thesis: "Influence of  
Cerebrolysin, a peptide derivative and a  
synthetical amino acid solution on learning  
and behaviour of rats" in cooperation with  
the pharmaceutical industry  
1989: Ph.D. graduation (Zoology/Physiology and  
Biochemistry)

---

**Experience:** 1985 – 1989: Tutor at the Institute of Zoology  
1989 - 1993: Assistant at the Karl - Franzens University  
Graz, Austria, Institute of Zoology (Dept.  
Metabolic Physiology)  
1989 – 1994: Instructor for under graduate students at the  
Institute of Zoology  
1989 - 1993: Research cooperation with EBEWE  
Pharmaceuticals, Ltd, Graz, Austria  
1989 - 1993: Instructor for Ph.D. students at the Institute  
of Zoology  
09/1993 –  
09/1999: Employee at EBEWE Pharmaceuticals;  
Head of the Neurobiology Working Group  
(Head of the departments preclinical and  
clinical research: Dr. Manfred Windisch)  
09/1999 –  
11/2000: Employee at JSW Research  
Forschungslabor Ges.m.b.H., Graz, Austria  
Since 12/2000: Head of the department preclinical research,  
member of the executive board at JSW  
Research, Graz, Austria



Since 1993: Instructor of Diploma and Ph.D. students in cooperation with the Karl – Franzens University and Medical University, Graz, Austria

---

**Other activities:**

1991 – 2000:	Research cooperation with Prof. Angel A. Zaninovich, Centro de Medicina Nuclear, University of Buenos Aires
1993 – 2000:	Research cooperation with Prof. Ruben Boado, UCLA
Since 2002:	Research cooperation with Prof. Dora Kovacs, Massachusetts General Hospital East, Centre for Aging, Genetics, and Neurodegeneration

---